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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,190	03/11/2004	James M. Hume	P-121896.0002.032	5304

7590 09/21/2005
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EXAMINER

FLETCHER III, WILLIAM P

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/798,190

Applicant(s)

HUME, JAMES M.

Examiner

William P. Fletcher III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-42 is/are pending in the application.
- 4a) Of the above claim(s) 33-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-23 and 40-42 is/are rejected.
- 7) ☐ Claim(s) 24-32 and 37-39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Receipt is acknowledged of applicant's compliant amendment and response, filed 01 July 2005. To clarify the record at this point in the prosecution, claims 18-42 are pending.

Election/Restrictions

2. Newly submitted claims 33-36 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-18 and 37-42, drawn to a method for lining concrete structures, classified in class 427, subclass 230.

II. Claims 33-36, drawn to a concrete system, classified in class 428, subclass 411.1+.

The inventions are distinct, each from the other because of the following reasons:

4. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process: on in which a preformed, pre-cured, two layer liner is adhesively applied to the surface of the concrete structure.

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5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. Since applicant has received an action on the merits for the originally presented invention, this invention (i.e., claims 18-32 and 37-42) has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 33-36 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Response to Arguments

7. The objection to the spec., set-forth in the prior Office action, is withdrawn in view of applicant's amendment.

8. Applicant's arguments filed in the response filed 01 July 2005 have been fully considered but they are not persuasive.

Applicant argues that, in Bomhard, the foam does not cure to form two distinct layers, as required by the claims. The examiner respectfully asserts that this is not required by the claims. Independent claim 18 recites "curing said foam liner material to form a surface layer and a barrier layer on said concrete structure" and independent claim 23 recites "curing said foam material to result in the formation of a protective liner over said concrete structure." Claim 18 requires only that the foam liner be cured and that the resulting structure include a surface layer and a barrier layer. Claim 23 requires only that the foam material be cured and that the resulting structure be a protective liner. The claims do not require that the applied single layer of foam liner form, upon curing, two distinct layers on the surface of the concrete structure. This

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response is also applied to applicant's arguments re: the rejections based on Bertram. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Consequently this argument is not persuasive.

Applicant argues that, in Bomhard, the foam liner is not applied directly to the surface of the concrete, as required by the claims. Again, the examiner respectfully asserts that this is not required by the claims. Dependent claim 22 and independent claim 23 recite "directly to said surface of said concrete structure." This does not require that the surface to which the foam is applied be concrete. Bomhard teaches concrete overlaid with a metal liner, thereby forming a structure including concrete (i.e., a concrete structure). Again, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Consequently this argument is not persuasive.

With respect to newly-presented system claims 33-36, applicant states: "Unlike the liner that was the subject of the previous restriction requirement, the system of claims 33 and 34 can only be achieved by applying directly to concrete the foam that is the subject of the invention, namely a foam that when cured forms two distinct layers." The examiner disagrees. These claims are quite distinct from the previously-examined method claims for other reasons, cited above. However, as noted, the method claims do not require a foam that, when cured, forms two distinct layers. This is yet another reason why the newly-presented claims are separate and distinct from the previously-examined claims.

Claim Rejections - 35 USC § 103

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9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action.

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. **Claims 18, 20, 21, 22, 23, 41, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bomhard (US 4,426,817 A).**

These claims are rejected for the same reasons as set-forth under this heading in the previous Office action.

With respect to new claims 41 and 42, as stated in the prior Office action, it is well-known in the coating art to clean a surface prior to the application of a coating material. For example, such cleaning promotes adhesion of the coating material to the surface and prevents contamination of the applied coating material.

12. **Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bomhard, as applied to claim 18 above, in further view of Grinshpun et al. (US 5,807,514 A).**

This claim is rejected for the same reasons as set-forth under this heading in the previous Office action.

13. **New claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bomhard, as applied to claim 18 above, in further view of Bennett (US 3,948,412 A).**

Bomhard is applied again here for the reasons previously cited.

While this reference does not teach an epoxy liner material, its teaching of applying “preferably polyurethane foam” is clearly non-limiting.

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Bennett teaches that both polyurethane and epoxy foams are known to those skilled in the art as suitable insulation foams (2:60-68).

It would have been obvious to one of ordinary skill in the art to modify the process of Bomhard so as to utilize, as the insulating foam, epoxy foam. One of ordinary skill in the art would have been motivated to do so by the desire and expectation of successfully providing an insulating foam on the surface of the concrete structure arising from the clear teaching of Bennett that both polyurethane foam and epoxy foam are known as suitable insulating foams.

14. **Claim 23 is rejected under 35 U.S.C. 103(a) as being patentable over Bertram (US 5,268,392 A) in view of Hume et al. (US 5,618,616 A).**

This claim is rejected for the same reasons as set-forth under this heading in the previous Office action.

Allowable Subject Matter

15. Claims 24-32 and 37-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. The following is a statement of reasons for the indication of allowable subject matter: The reasons for indicating allowable subject matter remain the same as those set-forth under this heading in the prior Office action. Namely, the prior art neither teaches nor suggests a foam material that cures into two or three separate layers, as **required** by these claims.

Conclusion

17. The prompt development of clear issues in the prosecution history requires that applicant's reply to this Office action be fully responsive (MPEP § 714.02). When filing an

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amendment, applicant should specifically point out the support for any amendment made to the disclosure, including new or amended claims (MPEP §§ 714.02 & 2163). A fully responsive reply to this Office action, if it includes new or amended claims, must therefore include an explicit citation (i.e., page number and line number) of that/those portion(s) of the original disclosure which applicant contends support(s) the new or amended limitation(s).

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Fletcher III whose telephone number is (571) 272-1419. The examiner can normally be reached on Monday through Friday, 9 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WPF 9/18/05
William Phillip Fletcher III
Patent Examiner, USPTO
Art Unit 1762

B. Chen
BRET CHEN
PRIMARY EXAMINER